



**Report of the Launch of the
Open Forum on Agricultural Biotechnology (OFAB) -
Uganda Chapter**

Shanghai Restaurant, Kampala

14 December 2007



BACKGROUND

The World Health Organization observes that 'Modern methods of biotechnology enable the accelerated development of food products with recombined or improved traits with an increased specificity compared with conventional techniques'. *Modern food biotechnology, human health and development: an evidence-based study, 2005.*

Despite numerous national and international initiatives, the use and development of modern agricultural biotechnology still remains a controversial global issue. The debate revolves around the hypothetical risks and questions related to value, safety and impact (agronomic, economic and environmental).

Most African countries are reluctant to adopt biotechnology-derived products as the policy makers are confronted with contradictory sources of information. Scientific facts are often mixed with social, ethical and political considerations. In the face of a rapidly growing population, declining agricultural productivity and reduced resources available for agricultural research, policy makers are pressed to make the right decisions and are looking for guidance.

Recognizing this need, the African Union established a High-Level African Panel on Modern Biotechnology to advise the African Heads of State on a common stand on biotechnology. This framework ought to be replicated at countries level giving national scientists and experts an opportunity to provide policy makers and the general public with evidence-based information needed to harness such technologies.

As an African organisation set up to access and deliver proprietary technologies, including biotechnology, to increase the productivity of African smallholder farmers, the African Agricultural Technology Foundation (AATF) initiated the establishment of a platform to facilitate the flow of information from the scientific community to policy makers and the general public. The platform, known as the **Open Forum on Agricultural Biotechnology in Africa** (OFAB), is designed to bring together stakeholders in biotechnology and enable interactions between scientists, journalists, the civil society, industrialists, lawmakers and policy makers.

OFAB Kenya chapter was launched in Nairobi in September 2007 and is hosted by AATF and International Service for the Acquisition of Agri-biotech Applications (ISAAA) through a collaborative arrangement. Its management is through a programming committee whose members are drawn from the Ministry of Agriculture, learning institutions, research institutions and international agricultural organizations.

The Forum takes the form of a monthly lunch meeting that provides an opportunity for key stakeholders to know one another, share knowledge and experiences, make new contacts and explore new avenues of bringing the benefits of biotechnology to the African agricultural sector. The Open Forum provides an opportunity to make formal presentations or informal discussions focussing on the relationships between

science, technology, innovation, environmental protection, policy, trade, social benefits sharing and their impact on economic development.

Launch of Uganda Chapter of OFAB

The launch of Uganda Chapter of OFAB was the purpose of this meeting which took place in Kampala, Uganda on **14 December 2007 at Shanghai Restaurant from 12:00-3:00pm**. The meeting was hosted by the Uganda National Council for Science and Technology (UNCST) in collaboration with AATF and the Program for Biosafety Systems (PBS). Other partners in the initiative include National Agricultural Research Organisation (NARO), and Agrobiodiversity and Biotechnology, Association for Strengthening Agricultural Research in East and Central Africa (ASARECA). A programming committee comprising key stakeholders will be charged with the management of the Forum.

Invitations to the launch targeted participants from universities, research institutions, development organisations, UN agencies, agricultural industries, members of parliament, environmentalists, media, farmer organizations and civil society organisations.

HIGHLIGHTS OF REMARKS AND PRESENTATIONS

A summary of the remarks and presentations made by various speakers are provided below following the Program of the day (Annex 1).

Welcoming Remarks *by Dr. Peter Ndemere, UNCST*

Dr. Peter Ndemere welcomed participants to the strategic function aimed at raising awareness and sharing knowledge in the field of modern biotechnology. He thanked the Guest of Honour for accepting the invitation to officiate at the official launching of a Forum that will subsequently be held monthly and referred to as Open Forum on Agricultural Biotechnology in Africa (OFAB)-Uganda Chapter.

OFAB is a relatively new initiative of the African Agricultural Technology Foundation (AATF), a not-for-profit international Organisation based in Nairobi. It was started in September 2006 in Nairobi. Dr Ndemere thanked the team from AATF under the leadership of Dr. Mpoko Bokanga, the Executive Director, for bringing OFAB to Uganda. The main purpose of this forum is to facilitate the flow of information between the scientific community, policy makers, journalists, the civil society, industrialists, lawmakers as well as the general public to ensure better understanding of modern biotechnology and facilitate informed decision-making.

OFAB-Uganda Chapter will be owned by Ugandan institutions with the Uganda National Council for Science and Technology (UNCST) taking the lead. UNCST is going to continue organising these meetings in collaboration with National Agricultural Research Organisation (NARO), the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Association for Strengthening Agricultural Research in East and Central Africa (ASARECA), IFPRI's Program for Biosafety

Systems (PBS) and other organisations as identified by stakeholders from time to time.

He once again welcomed everybody to the launch and subsequent OFAB meetings requesting that, "Let us open science to the Public and have free interactions among people of various professions".

OFAB, Agriculture and African Development by *Dr. Mpoko Bokanga, AATF*



Dr. Bokanga at Launch in Kampala

Dr. Bokanga was very grateful to UNCST for enabling AATF to introduce OFAB to Uganda.

In his presentation, he elaborated on the various types of biotechnologies that exist and gave a detailed account on the biotechnology journey over the past 10,000 years. He highlighted some reasons why African agriculture is under-performing and the role biotechnology can play to improve this performance, and improve food security for the ever increasing population in Africa.

Dr Bokanga underscored the importance of OFAB as a platform where a critical mass of knowledge can be accessed by policy and law makers, by journalists and the general public, to ensure that decisions regarding the adoption of new technologies are guided by informed choices based upon knowledge of local priorities, opportunities offered by such technologies, expected benefits and ability to manage risks.

Dr Bokanga cited Intellectual Property Rights (IPRs) as one of the challenges that face Africa in adoption of biotechnology. AATF negotiates for loyalty free access to proprietary technologies for the benefit of poor smallholder farmers.

In conclusion, he challenged Africans to overcome the unfounded fear of genetically modified foods saying that Africa needs more technologies than any other region of the world. Dr Bokanga called for:

- Greater investments in science, technology and innovation systems to take advantage of the Gene Revolution and Biofuels Revolution
- Creative partnerships between the public and private sectors
- Regulatory regimes supported by scientific evidence and focusing on maximizing the benefits of new technologies
- An open continental market
- A balance between safety and progress, to be attained through OFAB

Agro-biodiversity and Development: The Role of Science *by Dr. Charles Mugoya, ASARECA*

In his introduction, Dr. Mugoya shared the prediction that by 2050, 27 countries in the world will have a population of above 50 million people. One of these countries will be Uganda where predictions show that the country will have a population of 105 million, making it 17th in the world and the 5th in Africa.

He stated that over the past decade, the number of people receiving WFP food aid in Sub-Saharan Africa had doubled from 21.2 million in 1995 to 43.1 million in 2005. Dr Mugoya highlighted some of the key areas in which scientific interventions offer opportunities for exploiting agro-biodiversity for development. These include:

- Income diversity
 - Enhanced Productivity
 - Income Generation
- Conservation
 - Arresting genetic erosion
 - Conservation/storage behavior
 - Regeneration protocols
 - Community conservation
 - Genomics
- Dietary diversity
 - Understanding of ethno-biology, cultural & nutritional benefits of various foods
 - Mapping & matching indigenous ABD to solve nutritional deficiencies.

Dr Mugoya noted that in order to ensure successful exploitation of agro-biodiversity for development, there is need to get the TIIP right, that is:

- Appropriate Technologies
- Adequate supportive Infrastructure
- Effective Institutional structures
- Appropriate Policies

He however regretted the lengthy policy formulation processes saying that this is the greatest impediment to the use of biotechnology in Africa.

In conclusion Dr Mugoya highlighted the NEPAD's Comprehensive Africa Agriculture Development Programmes' (CAADP's) vision which is a 6% annual growth in African agricultural production by 2015 and noted that one of the key factors to achieving this vision is providing farmers with appropriate technologies.

Public policy for biotechnology: International lessons from European experience *by Mr. Mark Cantley, Guest Speaker*

In his introduction Mr. Cantley informed participants that the lessons he can offer are those obtained from some 28 years of working in public policy for biotechnology in the European Union, and at OECD, are not entirely positive. He summarized his personal opinion in one sentence used by Norman Borlaug at his prestigious award ceremony in India, in 2005, that “Western blockades of safe GM crops impede its acceptance in most poor, food-insecure countries”.

He noted that in Europe, in spite of the strategy that is basically positive about biotechnology, they have the most stringent regulatory framework in the world. This is because over the past two decades they have seen some high-profile events which have damaged the public confidence in science, in government, in industry, and in scientific advice to governments. As Europe is the largest agricultural importer in the world, these regulations are imposed on all countries that wish to export agricultural produce to Europe.

This aspect is a major danger for developing countries that need to improve the performance of their agriculture, while improving the conservation of their environment and health standards. This goes to show that although legislation is adopted nationally, it can have global adverse consequences.

“Soft” risks – with hard consequences

Aside from these international instruments, in principle legally binding, but slow and uncertain in application, there are some much more immediate international links and impacts. First, there are trading links: the threat of losing export markets can be a major constraint of governments, and of legislatures, and this threat is much more immediate and effective than some long-term notion of possible violation of an international agreement. Market positions can be destroyed very rapidly by fears, scares, public perceptions and opinions – whether or not scientifically well-based. Uganda has suffered specifically from the long delays, since 1994 to 2007, to authorize research to test the use of GM bananas as the most promising way to counter black sigatoka.

These are new kinds of risk known as “Soft risk” that is the sort of political reputational risk that can destroy the acceptability of products and technologies. These “soft risks” can have hard consequences.

Closely related – for public opinion matters to politicians – are the risks that can be created by legislative fiat, regulatory decision, and court judgements – all of them highly subject to public opinion.

Modern biotechnology has suffered greatly from this sort of risk – and the battles are continuing. However, as GM technology provides improved varieties of more and more crops, and is adopted in more and more countries, it will be necessary to find pragmatic arrangements for coexistence of conventional, organic and GM crops.

In conclusion, Mr Cantley offered these lessons:

- A **coordinated national strategy** is a powerful instrument for advancing a country's interest in the use of modern biotechnology. Its effective implementation requires commitment from the political leadership.
- **Don't be trapped** into following an agenda dictated by other parties, for other purposes.
- Don't ignore other's mistakes, and don't repeat them – **learn** from them.
- **Define your own needs and priorities.**
- Use international collaborations to **expand your opportunities, not to constraint them.**
- **Maintain adaptive capability**, a dynamic policy stance which can be readily updated. International collaboration agreements should allow flexibility for adaptation at national level.

OPEN DISCUSSIONS *moderated by Dr. Dennis Kyetere, NARO*

Hon. Kibirige Sebunya, Minister of State for Agriculture

In his remarks, the Minister stated that he was disappointed by the continued communication to the same people and he referred to it as inbreeding. He urged the organizers to ensure that future meetings include environmentalists and other stakeholders that have little understanding of biotechnology.

Hon. Kibirige noted that science is too important to be left in the hands of politicians so he encouraged more scientists to join politics so that they drive the country's agenda. The Minister requested the local scientists to proactively engage in biotechnology research that will help solve the major constraints of agriculture. He urged his fellow MPs to work together to ensure that the country put in place a Biotechnology and Biosafety Policy, and Biosafety Regulations.

Hon. Kibirige noted that the major impediment to approval of the policy and application of most science technologies is that UNCST the hosting body is in the Ministry of Finance, Planning and Economic Development, which is a wrong place. He requested the Presidential Advisor for Science, Ms. Kabirisi to advise the President on the need to create a Ministry for Science and Technology.

Hon. Frank Tumwebaze, Executive Secretary UNFFE and MP

Emphasized the need for Uganda to have in place a Biosafety law that will ease products regulation. He noted that Uganda needs to know what suits "her" instead of outsiders driving their agenda. Hon. Tumwebaze noted that Uganda needs to state its position with regards to biotechnology.

Hon. Gordon Sematiiko-Katende, MP

He thanked the think-tanks and the presenters of the meeting. He said that in his understanding, OFAB was meant to demystify biotechnology and on that note he requested the organizers to have the opponents and less informed stakeholders be provided with invitations to the forum.

Dr. Kyetere responded to this request by informing participants that the purpose of that particular day was to launch the forum, but follow-up meetings will have a wider invitation list involving opponents and environmental activists.

Erotus Nsubuga, Proprietor AGT Laboratories

Mr. Nsubuga informed participants that the President of Uganda had set-up a group called "President's Roundtable" on which he serves as the agribusiness sector representative. He said that biotechnology had been selected as a top priority and as such they were pushing for the approval of the Policy including having direct meetings with the Prime Minister. They had been promised that this policy was top on the agenda for 2008 and a deadline of 15th February had been given for tabling the policy.

Hon. Joseph Mugambe, Chairman S&T Committee, Parliament

He informed participants that he had already benefited from biotechnology at his farm through the tissue culture banana he had purchased from AGT laboratories. However, he requested that scientists effect control measures to ensure they do not destroy the agricultural system instead.

Richard Tushemereuwe, State House

He noted that the need for monthly themes for the forum so that participants engage in guided discussions that are exhaustive of a particular topic.

CLOSING SESSION

Closing Remarks by *Hon. Eng. Hillary Onek, Minister of Agriculture*



Hon. Hilary Onek at Launch, Kampala

Hon. Eng. Hillary Onek thanked the think-tanks of this meeting and requested that ways to ensure sustainability be identified. He expressed satisfaction with the technical level of the discussions and suggested that organizers take a much more focussed approach in future fora.

The Minister gave a brief on Uganda Government's plan for agriculture informing participants on the PMA and its pillars, the roles of NARS and NAADS and how they work together to provide farmers with appropriate technologies.

He sadly noted that the output of agriculture in Africa was half or less than in other parts of the world and this was attributed to:

- Poor technologies; NARO is working hard to upgrade their research so as to overcome this constraint. Currently, NARO is leading worldwide in banana biotechnology research.
- Poor pay; Ugandan scientists are under-paid and this may result in their desire to look for greener pastures. We need to find ways to motivate them.
- Low level mechanical technology; the main tool used is a hand-hoe. We are in the process of trying to introduce agricultural mechanisation, irrigation and branding.
- Low technology maintenance; We need to upgrade the level of technology maintenance.
- Value addition to agro-products to improve the output/income.

As a way forward, the Minister suggested the following:

- Increase knowledge and total awareness
- Ensure that farmers are provided with inputs alongside the teaching
- Change the approach of economies of scale
- Bring on board environmental advocates
- Have more scientists joining politics

In conclusion, Hon. Eng. Hillary Onek noted that biotechnology provides practical answers to some of the greatest challenges mankind faces at the dawn of a new millennium, such as hunger and malnutrition. He observed that biotechnology is an accessible and exciting new development that is already improving the way people live. He made a clarion call to scientists saying: "Let us give our African farmers an opportunity of choice."

With these remarks, Hon. Eng. Hillary Onek declared OFAB-Uganda Chapter officially launched.

ANNEXES

Annex 1: Program

Moderator: Dr. Dennis Kyetere, Director General, NARO

Duration	Activity	Resource person
12.00-12.15 pm	Arrival and registration of guests	UNCST
12.15-12.20 pm	Welcoming remarks, recognizing guests and invitation to serve lunch	Dr. Peter Ndemere Executive Secretary UNCST
12.20-12.50 pm	<i>Lunch is served</i>	UNCST
12.50-1.05 pm	OFAB, Agriculture and African Development	Dr. Mpoko Bokanga Executive Director AATF
1.05-1.20 pm	Agro-biodiversity and Development: The Role of Science	Dr. Charles Mugoya , <i>Program Manager, Agro-biodiversity and Biotechnology, Association for Strengthening Agricultural Research in East and Central Africa (ASARECA)</i>
1.20-1.45 pm	Public policy for biotechnology: International lessons from European experience	Mr. Mark Cantley Former Science Adviser European Commission
1.45-2.05 pm	Open discussions	Dr. Dennis Kyetere , <i>Director General, National Agricultural Research Organisation (NARO)</i>
2.05-2.25 pm	Remarks by the Hon. Minister of Agriculture, Animal Industry and Fisheries	Hon. Eng. Hillary Onek <i>Minister of Agriculture, Animal Industry and Fisheries</i>
2.30 pm	Networking and Guests leave at pleasure	

Annex 2: List of Participants

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